

Developing Practice: Teaching Teachers Today for Tomorrow

Theme: Formal Education

Sub-theme: Revamping Teacher Education

Tony John Mays, Contracted researcher to Unisa

usso4@unisa.ac.za

Context: A call for more and better teachers

A recent policy statement from the Department of Education in South Africa (RSA 2007) calls for 'more teachers, **better** teachers' (emphasis added) and the NEPAD education desk (NEPAD c.2006:2) has identified a number of challenges facing teacher education in Africa more generally while also expressing concern about numbers and quality.

The central defining role of a teacher as a knowledge worker, able to organise knowledge and learning in a systematic way, needs to be foregrounded (Morrow 2007). Nurturing a commitment and ability regarding lifelong learning and the appropriate use of appropriate technology to attain educational goals would seem to be pre- and co-requisites given the current explosion of access to information.

The new teacher education policy framework in South Africa (RSA 2007) meanwhile makes teaching practice a central focus of an Initial Professional Education and Training programme and national accreditation requirements (CHE 2008) expect direct institutional involvement in the placing and supervision of student teachers on teaching practice.

Do as I do or do as I say?

Glennie and Mays (2008, 2010) suggest that often teacher education courses do not sufficiently model appropriate practice and Robinson (2003:208) notes a tendency to focus on certification rather than on developing practice.

The challenges of developing suitable curricula that influence the practice of teaching in a positive and sustained way are well documented (Adler and Reed 2002, Kruss 2009, UNESCO-BREDA 2009, Welch & Harley 2010, Woolfolk 2007). Three currently forceful arguments are for greater attention to be paid to the context of practice and student-teachers' own value systems (Harley, Barasa, Bertram, Mattson and Pillay 2010, Smit and Nduna 2008, Whitelaw, de Beer and Henning 2008, Moon 2006, Barak and Mansur 2009a, b; Burton 2009; Ropo, Mäkinen, Yrjöinen, Syvänen, and Portimojärvi, 2009) as well as the pedagogical content knowledge of the teacher (Adler and Reed, 2002; Botha, 2009).

Within these broad theoretical parameters, Figure 1 sets out a possible curriculum model based on the modified requirements of current policy in South Africa (RSA 2000), (RSA 2007).

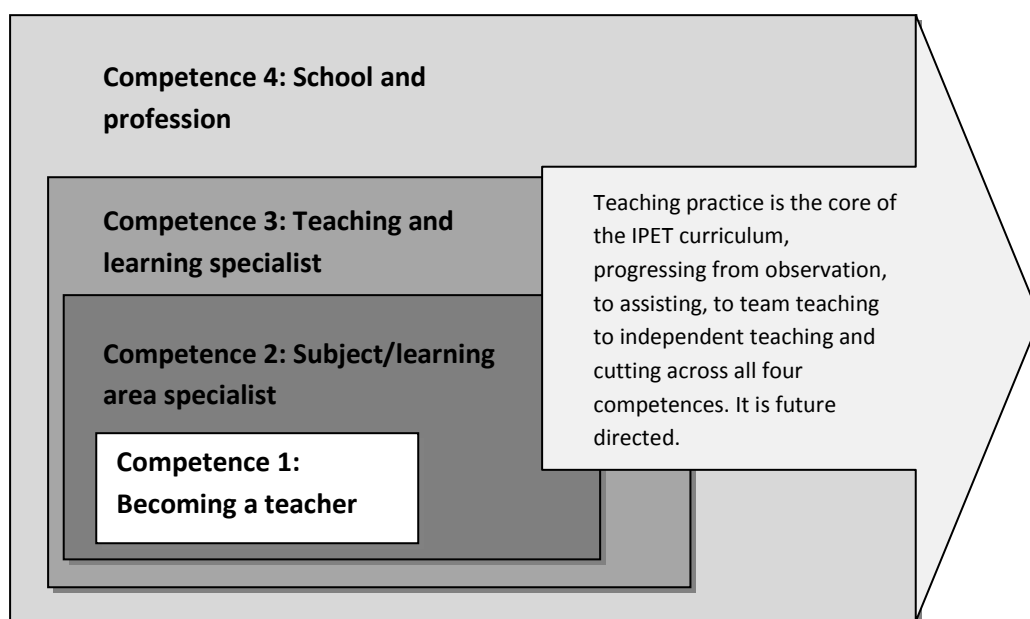


Figure 1: Teaching practice in the IPET curriculum

The starting point of the initial professional education and training of teachers, **Component 1**, is the start of a conversation about what it means to ‘become a teacher’. Starting from this foundation, the four components of the programme build upon each other in the sequence in which student-teachers tend to have questions – starting from personal experience and then thinking about WHAT to teach (Component 2), HOW to teach (Component 3) and WHY to (continue) to teach (Component 4) as reflected in a study by Karaman (2009) and a commitment to nurturing the growing autonomy of practice of the student-teacher.

Overall the realities of the postmodern connected environment suggest the need to develop communities of learning and practice (Wenger 2000:163-4) to facilitate the exchange of ideas and support for research-based practices in teacher education and development. Increasingly this dialogue would be mediated via mobile networking (Ally 2009).

Appropriate use of appropriate technology

A growing body of literature provides insight into the possible advantages and the minimum requirements for integrating ICTs into ODL provision more generally (Simonson, Smaldino, Albright & Zvacek (2003) and on the unique opportunities provided by the online environment in particular (Anderson & Elloumi c.2004). The literature suggests the need to recognize the increased diversity of the potential learners and to design with different learning needs in mind from the outset (Ehlers 2004; Davis in Moore 2007), including the need to address issues of cultural diversity (Gunawardena and LaPointe in Moore 2007), and to make the necessary investment in appropriate curriculum design ahead of marketing and registration Butcher (c. 2001). It is then necessary to create awareness of the nature and demands of distance and technology mediated learning prior to registration (Simpson 2004; Davis in Moore 2007) and to give attention to the ways in which both tutors and learners are prepared, monitored and supported in an online or technology mediated learning environment

(McPherson and Nunes 2004) during the learning process. The learning process must be informed by an understanding of adult learning theory (Davis in Moore 2007) and the changing expectations and preferred learning styles of students (Dede, Dieterle, Clarke, Ketelhut and Nelson in Moore 2007). Caplan, and Thiessen and Ambrock (in Anderson & Elloumi c.2004) point to the need for multi disciplined teams to develop these kinds of programmes – which will obviously have implications for project management, time and cost and in turn models a particular form of professional practice.

Welch, Drew and Randall (2010) report on a Saide engagement with an on-line learning process to explore how to train tutors to support distance learning on-line. They conclude that, designed appropriately, an on-line course can result in greater engagement and interaction but question whether such an approach can be used effectively for large scale provision.

Generally, teachers (and trainers) in South Africa have tended to be slow to access the potential of computer technology generally and online potential in particular. In schools which have access to ICTs, reliable internet connectivity varies widely as does teacher readiness to use the technology, so administrative usage tends to outweigh curriculum usage (Saide 2010).

The key point to be made here is that the way in which we use technology as teacher trainers models particular values and uses for our student-teachers. Therefore we need to make conscious choices to use appropriate technologies in appropriate ways taking cognisance of both our learning purposes and the technology profile and contexts of practice of our target learners.

IPET through ODL

Moon et al. (2007: 64) observe: “One common mistake in the design stage of program development is to give attention to material development at the expense of well-thought-through strategies for support, assessment, and quality assurance”.

Recently within Unisa there has been recognition of the need to think and plan more holistically in terms of the “student walk” through the institution (Louw 2007) and the “fit” or lack thereof between student and institution expectations, preparedness and responsiveness at each key step of the walk (Prinsloo 2009). Table 1 below illustrates how appropriate technologies can be harnessed appropriately in each step of the student walk at Unisa (thus modelling appropriate practice for student-teachers):

Table 1: Technology and the student walk

Step in the student walk	Appropriate technology for purpose and audience
1. Marketing and orientation	Provision of information in user-friendly styles and multiple modes (e.g. online, mobile – CDR, DVD, podcast, audio/video, print) and access to OER examples of learning resources enables potential students to make more informed choices. Supported by online advisors, call centre, or staff at decentralised regional centres.
2. Application: Responsible Open Access Programme	Provision of diagnostic self-test quizzes available on-line, on DVD, on flash drives or in-person at regional centres can help potential students to make appropriate choices about what, how much and in what mode to study. The emphasis should be on the most appropriate route to access learning rather than on testing for exclusion. Supported by online advisors, call centre, or staff at decentralised regional centres.

3. Registration	Students can register online remotely, at a self-service terminal at a regional centre, or seek personal assistance at a regional centre. Currently about 70% of Unisa students register on-line. A technology-enhanced registration process allows for automatic pop-up alerts regarding pre- and co-requisites, possible exam clashes, workload challenges and WIL components such as teaching practice. It also allows for the possibility of immediate access to digital versions of resources immediately on successful registration through the use of a 'toaster'.
4. Teaching and learning	
Orientation	Traditionally Unisa has relied on printed tutorial letters at programme (300 series) and module (100 series) levels for orientation purposes and these are also available in PDF format online and so can be downloaded should students lose their copy. Other orientation possibilities include youTube, video-conferencing, satellite TV or radio broadcast, video on DVD or podcast, an etutor led small group online or tele-conference, and where the need exists and numbers justify it, even a face-to-face contact session in a regional centre, other institution, school, church hall, teacher centre etc. All contact with student-teachers should consciously model appropriate teacher-student behaviour.
Maintenance/Formative assessment	In many institutions, formative assessment in the form of assignments, is a pre-requisite for entry to summative assessment (most often in the form of a formal examination). 10% of students either do not complete or do not "pass" their formative assessment. So: Provide SMS and email reminders of deadlines Set up online discussion fora related to assignment preparation Provide for an etutor or student led (PCL) small group online or tele-conference, and where the need exists and numbers justify it, even a face-to-face contact session Provide for online, postal and in-person submissions Provide for online marking and marks submission Automate routing of non-submissions or weak submissions for pro-active follow-up by an etutor – by phone, email, or skype Provide feedback on problem areas in a TL, email, sms, in the online forum, via etutor or face-to-face tutor For the joint exploration of practice consider having students engage with digital copies of lesson planning documents and videos of classroom practice and encourage critical engagement online, by mobile, in an etutorial or in a face-to-face tutorial; maintain a programme and TP website throughout the programme including updates on policy, news articles, research publications etc. as well as informal chat room facilities
Consolidation/Summative assessment registration	10% of students successfully complete the formative assessment but although registered to attempt summative assessment do not present themselves. So: Provide SMS and email reminders of timetables

	<p>Provide SMS or online booking of exam candidacy and automated reminders for deferrals</p> <p>Automate routing of non-registrations for pro-active follow-up by an etutor – by phone, email, or skype</p> <p>Provide feedback on key areas/ assessment foci in a TL email, sms, in the online forum, via etutor or face-to-face tutor, or use YouTube, video-conferencing, satellite TV or radio broadcast, video on DVD or podcast</p>
Summative assessment	<p>Of the 80% of students who present themselves, 70% of Humanities students pass first time (pass rates tend to be lower in other fields), yielding an initial cohort throughput of $80\% \times 70\% = 56\%$. Track trends automatically to prioritise interventions.</p> <p>Where possible provide both online and more traditional opportunities to complete summative assessment</p> <p>Automate routing of no-shows or poor performance for pro-active follow-up by an etutor – by phone, email, or skype</p>
2 nd examination opportunity	<p>At Unisa, students who “fail” a module with a stipulated subminimum can register for a 2nd examination opportunity in the following semester.</p> <p>Provide SMS and email reminders of timetables</p> <p>Provide SMS or online booking of exam candidacy and automated reminders for deferrals</p> <p>Automate routing of non-registrations for pro-active follow-up by an etutor – by phone, email, or skype</p> <p>Provide feedback on key areas/ assessment foci in a TL email, sms, in the online forum, via etutor or face-to-face tutor, or use YouTube, video-conferencing, satellite TV or radio broadcast, video on DVD or podcast</p>
5. Graduation and alumni	<p>Build and maintain a database of graduates; keep regular contact with alumni through a quarterly enewsletter; conduct eimpact studies; recruit graduates as etutors ...</p>

Conclusion

There is a hierarchy in decision-making implied by the discussion in this paper:

First, we need to design a curriculum that actually focuses on the practice of teaching.

Second, we need to design learning pathways and learning activities that model the approaches to knowledge, learners and technology usage we would like student-teachers themselves to exhibit in their own teaching.

Third, we then need to use the most appropriate technologies in the ways most appropriate to the learning intention taking cognisance of the (changing) technology profile of our student-teachers and their learners as well as their contexts of practice.

Bibliography

Adler, J. & Reed, Y. Eds. 2002. *Challenges of Teacher Development: An investigation of take-up in South Africa*. Pretoria:Van Schaik.

- Ally, M. Ed. 2009. *Mobile Learning: Transforming the Delivery of Education and Training*. Edmonton: Athabasca University Press.
- Anderson, T. & Elloumi, F. Eds. c.2004. *Theory and Practice of Online Learning*. Athabasca: Athabasca University.
- Barak, J. and Mansur, R. 2009a. *Being and Becoming a Teacher: 'Living' the Curriculum of Teacher Education*. Paper presented at 3rd Triennial IAACS Conference, Somerset-West, Cape Town, 7-10 September, 2009.
- Barak, J. and Mansur, R. 2009b. *Professional Identity and 'The Good'*. Paper presented at 3rd Triennial IAACS Conference, Somerset-West, Cape Town, 7-10 September, 2009.
- Botha, M. L. 2009. *In-service Teachers Perceptions of Pre-Service Teachers' PCK: Could Problem Based Learning Be Considered a Remedy?* Paper presented at 3rd Triennial IAACS Conference, Somerset-West, Cape Town, 7-10 September, 2009.
- Butcher, N. c.2001. Online Learning: Possibilities and Pitfalls in *Unit 10 : Developing Online Materials. Unesco online course development guide*. <http://www.saide.org.za/unesco/unit%2010.htm>. Accessed 10/06/2004.
- Council on Higher Education (CHE). 2007. *Higher Education Monitor No. 6, A Case for Improving Teaching and Learning in South African Higher Education, October 2007*. Pretoria:CHE.
- Council on Higher Education (CHE). 2008. Comments on improvement plans for BEd and PGCE. Dated 12 May 2008.
- Davis, J. D. 23 Developing Text for Web-Based Instruction in Moore, M. G. Ed. 2007. *Handbook of Distance Education. Second Edition*. New Jersey & London: Lawrence Erlbaum Associates, Publishers. 285-294
- Dede, C., Dieterle, E., Clarke, J., Ketelhut, D. J. & Nelson, B. 27 Media-Based Learning Styles in Moore, M. G. Ed. 2007. *Handbook of Distance Education. Second Edition*. New Jersey & London: Lawrence Erlbaum Associates, Publishers. 339-352
- Ehlers, U-D. 2004. *Quality web-based from a learner's perspective*. Best paper award at the 3rd EDEN Research Conference, Oldenberg, 2004
- Glennie, J. & Mays, T.J. 2008. *Teacher education through distance education*. Paper presented at the 2nd ACDE conference, Abuja, Nigeria. (Extended edition in press for *African Journal of Distance Education*, 2010)
- Gunawardena, C. N. & LaPointe, D. 45 Cultural Dynamics of Online Learning in Moore, M. G. Ed. 2007. *Handbook of Distance Education. Second Edition*. New Jersey & London: Lawrence Erlbaum Associates, Publishers.
- Harley, K., Barasa, F., Bertram, C., Mattson, E., & Pillay, S. 2010. "The Real and the Ideal": Teacher Roles and Competences in South African Policy and Practice. Under review for *International Journal of Educational Development*.
- Harley, K. & Welch, T. 2010. A Framework for Teacher education Programmes. Available at: Teacher Education Space, www.oerafrica.org.
- Karaman, A. Cendel. 2009. *Mapping prospective teachers' thoughts on curriculum, profession and practices*. Paper presented at 3rd Triennial IAACS Conference, Somerset-West, Cape Town, 7-10 September, 2009.
- Kruss, G. Ed. 2009. *Teacher Education in South Africa Series – Opportunities and Challenges for Teacher Education Curriculum in South Africa*. Cape Town: HSRC Press. Downloaded from: www.hsrcpress.ac.za 11/05/09
- Louw, H. A. 2007. *Open Distance Learning at Unisa*. Pretoria: Unisa.
- Mabunda, P., Sibiyi, H., Mampuru, M., Maila, W. M., Schoeman, S. Davin, R. J. & Mays, T. 2009. *Conceptualising and Managing Teaching Practice in IPET through ODL*. Unpublished discussion document.
- McPherson, M. & Nunes, M B. 2004. *The Role of Tutors as a Integral Part of Online Learning Support*. Paper shortlisted for the "Best paper award" at the 3rd EDEN Research Conference, Oldenberg, 2004.

- Moon, B. 2006. *Research analysis: A global overview of current policies and programmes for teachers and teacher education – Prepared for the joint ILO/UNESCO Committee of Experts concerning Teaching Personnel*. Milton Keynes:OUUK.
- Morrow, W. 2007. What is teachers' work? *Journal of Education*, No. 41, 2007. 3-20
- New Economic Plan for African Development (NEPAD). C.2006. *Teacher training and teacher development through open and distance learning in Africa, Chapter 1 of a Draft Report*. Pretoria:NEPAD.
- Prinsloo, P. 2009. *Discussion Document: Modelling throughput at Unisa: The key to the successful implementation of ODL*. Unisa: DISA/DCLD.
- Republic of South Africa (RSA). 2000. Norms and Standards for Educators. *Government Gazette No. 20844, February, 2000*. Pretoria:Government Printer.
- Republic of South Africa (RSA). 2007. The National Policy Framework for Teacher Education and Development in South Africa. *Government Gazette, 26 April 2007, No. 29832*. Pretoria:Government Printer.
- Robinson, B. 2003. 10. Evaluation, research and quality in Robinson, B. & Latchem, C. Eds. 2003. *Teacher Education Through Open and Distance Learning. World review of distance education and open learning Volume 3*. London/New York:RoutledgeFalmer/COL. 193-211
- Ropo, E, Mäkinen, M., Yrjöinen, S., Syvänen, A., and Portimojärvi, T. 2009. *Curriculum for identity in teacher education and school*. Paper presented at 3rd Triennial IAACS Conference, Somerset-West, Cape Town, 7-10 September, 2009.
- Sharma, P. (2005). Distance Education and Online Technologies in India. In Carr-Chellman, A. (ed.) *Global Perspectives on E-Learning: Rhetoric and Reality*, SAGE Publications, Thousand Oaks., pp.52- 65
- Simonson, M., Smaldino, S., Albright, M. & Zvacek, S. 2003. *Teaching and Learning at a Distance: Foundations of Distance Education. Second Edition*. New Jersey: Pearson Education Inc./Merrill-Prentice Hall.
- Simpson, O. 2004. *Access, Retention and Course Choice in Online, Open and Distance Learning*. Paper shortlisted for the "Best paper award" at the 3rd EDEN Research Conference, Oldenberg, 2004.
- Smit, B. & Nduna, B. 2008. Editorial: Where to with Teacher Development? *Education as Change*, 12(2), December 2008. 1-3.
- South African Institute for Distance Education (SAIDE). 2010. *e-Maturity and e-Readiness – Assessment Report Prepared for the Gauteng Department of Education. Draft Report 31 May 2010*.
- UNESCO-BREDA. 2009. *Universal Primary Education in Africa: the Teacher Challenge*. Dakar: UNESCO-BREDA.
- Welch, T., Drew, S. & Randall, C. 2010. *What Makes the Difference? A case study examining online tutoring and tutoring in conventional distance education. Draft discussion document*. Johannesburg: Saide.
- Wenger, E. 2000. Communities of practice and social learning systems in Reeve, F., Cartwright, M. & Edwards, R. 2002. *Supporting Lifelong Learning Volume 2: Organizing Learning*. London: RoutledgeFalmer/OUUK. Chapter 10, 160-179.
- Whitelaw, S., de Beer, J. & Henning, E. 2008. New Teachers In a Pseudocommunity Of Practitioners. *Education as Change*, 12(2), December 2008. 25-40.
- Woolfolk, A. 2007. *Educational Psychology. Tenth Edition*. Boston: Pearson Inc.

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